Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the applicant and/or assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

Listing of Claims:

1. (Currently amended): Data transmission process comprising,

a) at transmission:

- the data to be transmitted is divided into N data blocks (B1, B2, ..., BN),

- these N blocks are processed in parallel in N M-ary orthogonal keying (MOK) modulation channels, each modulation using a group of spread codes, each channel outputting a signal (S_1, S2, ..., SN), and a rank of the signals according to energy or amplitude, or combinations thereof,

- N spread signals output by said N M-ary orthogonal keying modulation channels are combined in a combining circuit, and

- the signal output by said combining circuit is transmitted,

b) at reception:

- the signal received (R) is processed in N M-ary orthogonal keying (MOK) demodulation channels, giving N data blocks (B_1, B2, ..., BN),

- said N data blocks are grouped together in series to reproduce the transmitted data.

2. (Previously presented): Process according to claim 1, wherein the modulation and demodulation include are comprised of M-ary bi-orthogonal keying (MBOK) modulation and demodulation.

3. (Previously presented): Process according to claim 1, wherein the modulation and demodulation include M-ary orthogonal keying (MOK) modulation and demodulation combined with phase shift keying (PSK) modulation and demodulation.

4. (Previously presented): Process according to claim 3, wherein the phase shift keying modulation and demodulation include differential phase shift keying (DPSK) modulation and demodulation.

5. (Previously presented): Process according to Claim 1, wherein the number of spread codes is the same in each group.

6. (Previously presented): Process according to Claim 1, wherein the spread codes used are all different from one group to another and the code numbers are equal to powers of 2.

7. (Previously presented): Process according to Claim 1, wherein certain spread codes are used in several groups.

8. (Currently amended): A Transmitter, comprising:

- means for dividing a data to be transmitted into N data blocks (B_1, B2, ..., BN),

- means for processing the N blocks in parallel in N M-ary orthogonal keying (MOK) modulation channels, each modulation using a group of spread codes, and each channel emitting a signal (S_1, S2, ..., SN), and a rank of the signals according to energy or amplitude, or combinations thereof, and

- a combining circuit operable to combine N spread signals output by said N M-ary orthogonal keying modulation channels,

- means for transmitting the signal output by said combining circuit.

9. (Previously presented): The transmitter according to claim 8, wherein the modulation comprises an M-ary bi-orthogonal keying (MBOK) modulation.

10. (Previously presented): The transmitter according to claim 8, wherein the modulation comprises an M-ary orthogonal keying (MOK) modulation combined with a phase shift keying (PSK) modulation.

11. (Previously presented): The transmitter according to claim 10, wherein the phase shift keying modulation comprises a differential phase shift keying (DPSK) modulation.

12. (Currently amended): A receiver, comprising:

- means for processing a signal received (R) in parallel in N M-ary orthogonal keying (MOK) demodulation channels, giving N data blocks (B_1, B2, ..., BN), the N data

blocks corresponding to signals previously ranked according to energy or amplitude, or combinations thereof,

and

- means for grouping these N data blocks together in series and reproduce transmitted data.

13. (Previously presented): The receiver according to claim 12, wherein the demodulation comprises an M-ary bi-orthogonal keying (MBOK) demodulation.

14. (Previously presented): The receiver according to claim 12, wherein the demodulation comprises an M-ary orthogonal keying (MOK) demodulation combined with a phase shift keying (PSK) demodulation.

15. (Previously presented): The receiver according to claim 14, wherein the phase shift keying demodulation comprises a differential phase shift keying (DPSK) demodulation.

16. (Previously presented): Process according to Claim 4, wherein the number of spread codes is the same in each group.

17. (Previously presented): Process according to Claim 5, wherein the spread codes used are all different from one group to another and the code numbers are equal to powers of 2.

18. (Previously presented): Process according to claim 1, wherein, at reception, the signal received (R) is processed in a group of P filters (11_1, 11_2, ...,11_P) distributed in N groups of filters, these filters being adapted to the spread code of the different groups of spread codes used at transmission.

19. (Previously presented): The receiver according to claim 12, comprising P filters distributed in N groups of filters, these filters being adapted to spread code of the different groups of spread codes used at transmission.